

WHAT IS CLAIMED IS:

1. An isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible
5 region of ENaC-beta mRNA, said region defined by nucleotides 463 through 490, 1077 through 1090, 1417 through 1431, 1452 through 1468, 1503 through 1519, or 1526 through 1538 of SEQ ID NO:1, and wherein said oligonucleotide inhibits the production of ENaC-beta.
- 10 2. A composition comprising the isolated antisense oligonucleotide of claim 1.
3. The composition of claim 2, wherein said composition comprises a plurality of isolated antisense oligonucleotides, wherein each antisense oligonucleotide
15 specifically hybridizes within a different accessible region.
4. An isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible
20 region of ENaC-beta mRNA, said region defined by nucleotides 1205 through 1222, 894 through 911, 1472 through 1489, or 1351 through 1368 of SEQ ID NO:2, and wherein said oligonucleotide inhibits the production of ENaC-beta.
- 25 5. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises a modified backbone.
6. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises one or more non-natural internucleoside linkages.
- 30 7. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide is an oligonucleotide analog.

8. The isolated antisense oligonucleotide of claim 4, wherein said oligonucleotide comprises one or more substituted sugar moieties.

9. The isolated antisense oligonucleotide of claim 4, wherein said
5 oligonucleotide comprises nucleotide base modifications or nucleotide base substitutions.

10. A composition comprising the isolated antisense oligonucleotide of claim
4.

10 11. The composition of claim 10, wherein said composition comprises a plurality of isolated antisense oligonucleotides, wherein each antisense oligonucleotide specifically hybridizes within a different accessible region.

12. A nucleic acid construct comprising a regulatory element operably linked
15 to a nucleic acid encoding a transcript, wherein said transcript specifically hybridizes within one or more accessible regions of ENaC-beta mRNA in its native form.

13. A host cell comprising the nucleic acid construct of claim 12.

20 14. A method of decreasing production of ENaC-beta in cells or tissues, comprising contacting said cells or tissues with an antisense oligonucleotide that specifically hybridizes within an accessible region of ENaC-beta.

25 15. An isolated antisense oligonucleotide that specifically hybridizes within an accessible region of ENaC-beta mRNA in its native form wherein said antisense oligonucleotide inhibits the production of ENaC-beta.

30 16. A method for modulating pain in a mammal, said method comprising administering to said mammal the isolated antisense oligonucleotide of claim 15.

17. A method of identifying a compound that modulates pain in a mammal, the method comprising:

contacting cells comprising a ENaC-beta nucleic acid with a compound;

and

5 detecting the amount of ENaC-beta RNA or ENaC-beta polypeptide in or secreted from said cell,

wherein a difference in the amount of ENaC-beta RNA or ENaC-beta polypeptide produced in the presence of said compound compared to the amount of ENaC-beta RNA or ENaC-beta polypeptide produced in the absence of said compound is an indication that
10 said compound modulates pain in said mammal.

18. The method of claim 17, wherein the amount of said ENaC-beta RNA is determined by Northern blotting.

15 19. The method of claim 17, wherein the amount of said ENaC-beta polypeptide is determined by Western blotting.

20. The method of claim 17, wherein said compound is an antisense oligonucleotides that specifically hybridize within an accessible region of ENaC-beta mRNA in its native form, wherein the antisense oligonucleotide inhibits production of
20 ENaC-beta.

21. A method for modulating pain in a mammal, said method comprising administering a compound to said mammal, wherein said compound modulates the
25 expression of ENaC-beta.

22. The method of claim 21, wherein said compound is an antisense oligonucleotides that specifically hybridize within an accessible region of ENaC-beta mRNA in its native form, wherein the antisense oligonucleotide inhibits production of
30 ENaC-beta.

23. The method of claim 21, wherein said pain is from diabetic neuropathy, postherpetic neuralgia, fibromyalgia, surgery, or chronic back pain.